



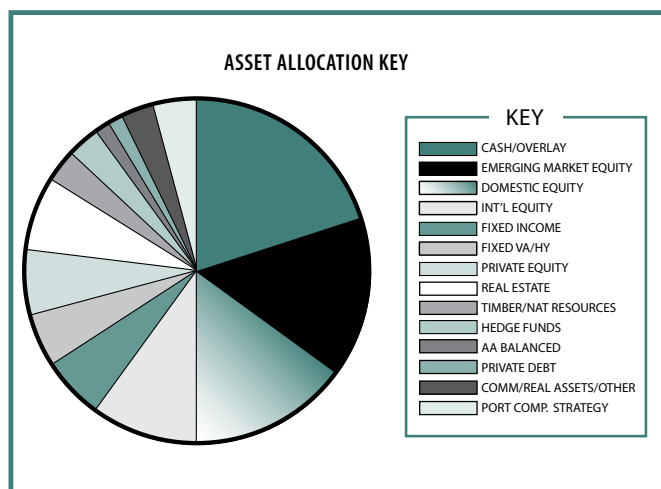
MASSACHUSETTS CONTRIBUTORY RETIREMENT BOARD PROFILES

INTRODUCTION

The Board Profile section of the PERAC Annual Report provides a detailed assessment of some of the important indicators relative to the financial health of the retirement systems. The information provided in this report can enable board members to provide factual comment and advice to policymakers as various proposals relative to the retirement law are assessed. Through this and other studies, the Commission seeks to provide objective, comprehensive, and accurate data for use by all interested parties.

A WORD ON PORTFOLIO VALUATIONS

In assessing investment performance, PERAC relies on the retirement boards to submit accurate and complete information about investment activity. PERAC numbers might differ from those provided to a board by its consultant because PERAC measures all assets, including monies not committed to investment management.



Asset allocation is presented in graph form. The Key used for the Asset Allocation graphs is shown in the preceding chart.

The way a board allocates its assets among the various investment classes available to it has long been recognized as the prime determining factor in the generation of returns. Allocation information reported by the investment consultants advising the retirement boards or PRIM forms the basis of these graphs. PERAC has not independently confirmed the accuracy of this data.

ACTUARIAL

As always, actuarial information details the fiscal condition of the systems, which can play a direct role in state and local budgets. The funded ratio indicates the extent to which assets cover system liabilities. When the system will pay off its unfunded liability and what type of funding technique is being used are also noted. PERAC has consistently urged boards to conduct actuarial valuations in order to provide an up-to-date assessment of the fiscal condition of the system.

The Funding Schedule item reflects the amortization schedule for the Unfunded Actuarial Liability (UAL). For example, 1.5% increasing with a year fully funded of 2030 means the UAL is being amortized on a 1.5% annually increasing basis to FY30.

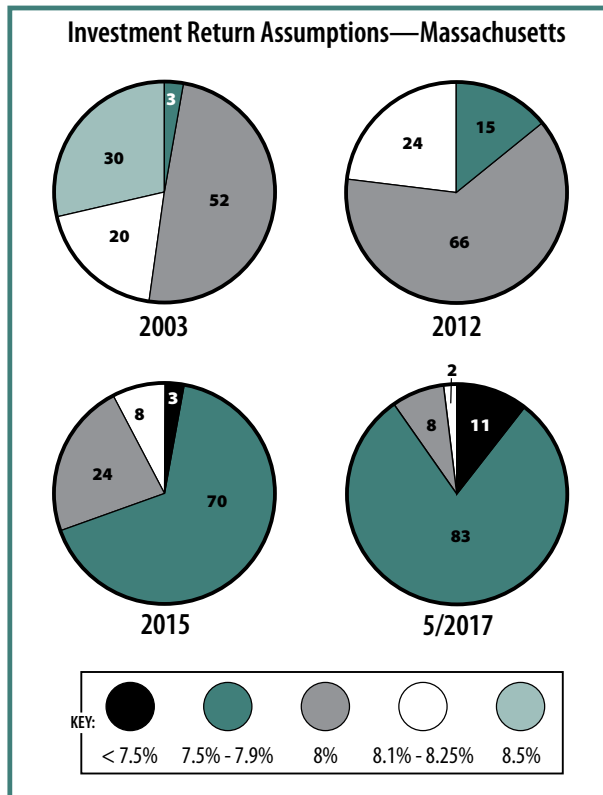
A number of systems utilize phase-in schedules in which payments increase more rapidly over the first few years of the schedule than later in the schedule. We reflect those schedules using the ultimate amortization schedule and note there is a phase-in. For example, 4.0% Increasing Phase-In with a year fully funded of 2035 means the total appropriation increases by a certain percent per year for a period of time and then the remaining unfunded liability is amortized on a 4.0% annual increasing basis until FY35.

Fourteen systems currently use a phase-in approach and both the percentage increase and number of years before the amortization begins vary. Schedules described as “Total Increasing” mean the annual appropriation increases by the amount indicated, which may vary, for the entire schedule. Sixty-four systems have such a schedule. In total, three-quarter of systems utilize a phase-in and/or total increasing schedule.

We have not reflected any 2017 valuation results in this report.

In the actuarial area, PERAC approved 62 revised funding schedules and completed 21 actuarial valuations in 2016. The valuations complemented the 50 valuations performed by private actuaries. The Actuarial Unit also completed the annual actuarial valuation of the Commonwealth’s pension liability. Throughout the year, PERAC responded to legislative and gubernatorial requests for analysis of legislation and made presentations at several forums.

The Massachusetts Investment Return Assumptions from 2003 to present are illustrated below.



LEGAL UNIT

PERAC’s Legal Unit, in addition to representing the Commission at all levels including the Supreme Judicial Court, issued 198 Legal Opinions and reviewed 616 disabilities in 2016.

MEDICAL PANELS/POST RETIREMENT EARNINGS

In addition to the information detailed in the Profiles, PERAC, as always, has been busy assisting the boards in other areas. In 2016, 659 medical panel requests were processed and 1,356 comprehensive medical evaluations were conducted. This led to the approval of 499 disability applications and 76 accidental death claims. 30 medical re-examinations of disability retirees took place.

Such medical evaluations and examination resulted in 3 members returning to work saving \$123,115.

PERAC is responsible for the post-retirement monitoring of disabled retirees. One aspect of that task is enforcing the earnings limits set forth in Chapter 32. In 2016, PERAC analyzed 15,895 earnings reports, 3,849 retirees reported earnings and 54 earned in excess of the statutory limits. An additional 101 retirees failed to comply with the reporting requirement. This resulted in the identification of \$839,993 in excess earnings and \$2,606,471 for non-compliance. In addition 37 retirees waived their allowance, saving \$502,028.

No members’ retirement benefit was modified under the Commission’s Modification Policy in 2016. This review to date has resulted in the modification of 15 member retirement allowances. Savings due to that action total \$299,967 annually.

AUDITS

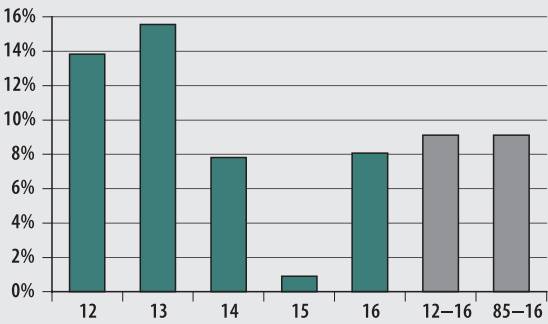
In 2016 PERAC published 24 audits of retirement systems. In addition, 20 follow-up audits were issued. In the last few years the Commission has awarded Certificates of Achievement to those systems found by our auditors to be operating in an exemplary fashion. In 2016 we issued 6 Certificates of Achievement. As always, PERAC audit staff conducted annual seminars on the preparation of the Annual Statement.

DISCLAIMER: In publishing this information PERAC makes no comment regarding any retirement boards’ asset allocation, investment strategy or manager/fund commitments.

COMPOSITE INVESTMENT PROFILE

- ▶ Commonwealth of Massachusetts
- ▶ Public Employee Retirement Systems and Pension Reserves Investment Trust

INVESTMENT RETURN (2012-2016, 5 YEAR AND 32 YEAR AVERAGES)



INVESTMENT

▶ 2016 Return	8.08%
▶ 2016 Market Value	\$76.5B
▶ 2012-2016 (Annualized)	9.12%
▶ 1985-2016 (Annualized)	9.11%